FIG. 1

COMPUTER _12_

CPU _14_

20

I/O INTERFACE _18_

MEMORY _16_

EVALUATION SYS. _28_

SELECTION SYS. _30_

ASSIGNMENT SYS. _32_

APPLICATION SYS. _34_

PERFORMANCE _36_

RANKING SYS. _38_

SUMMARY SYS. _40_

GENERATION SYS. _42_

DATA MINING ALG. _29_

STORAGE SYSTEM _24_
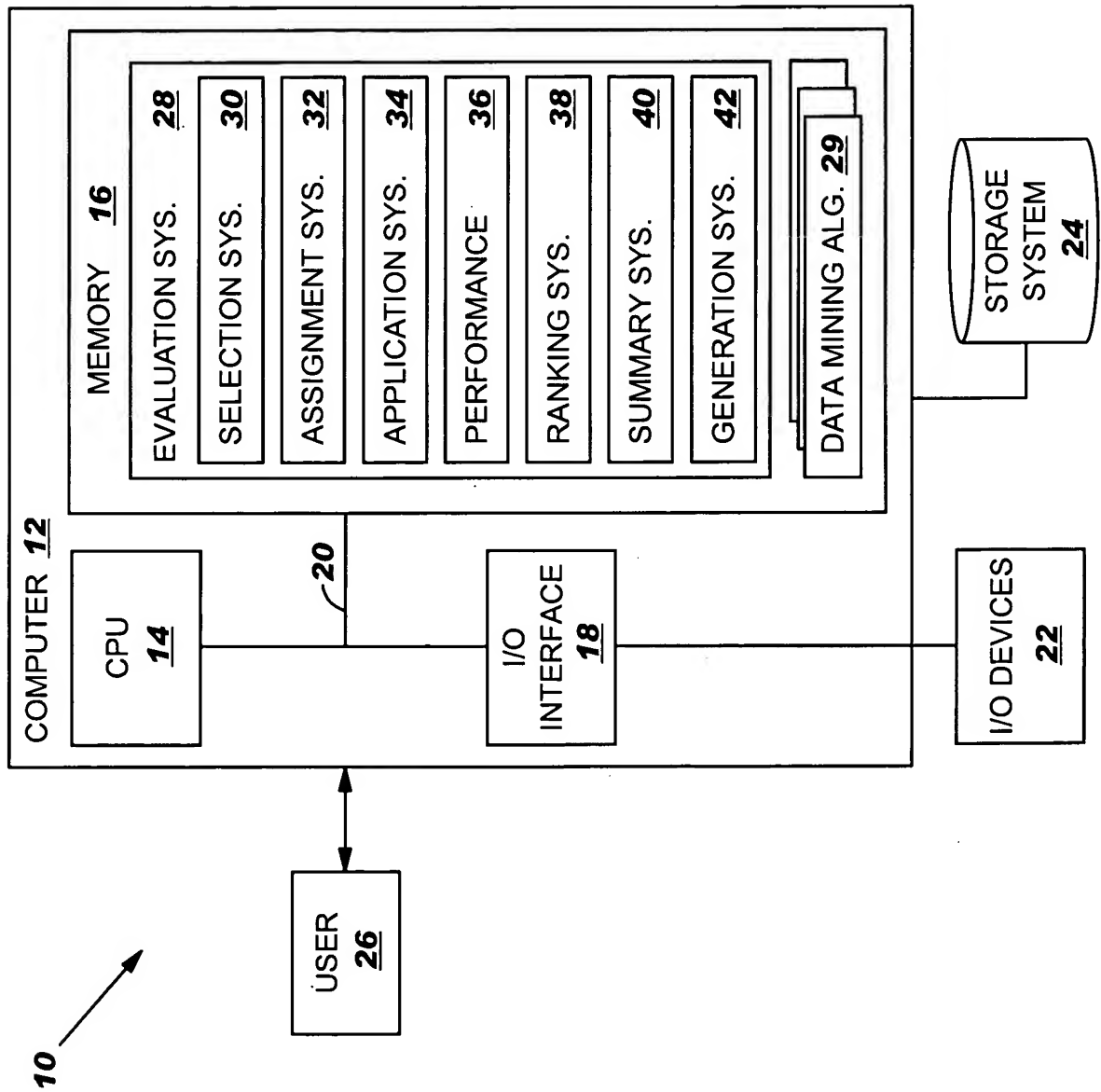
I/O DEVICES _22_

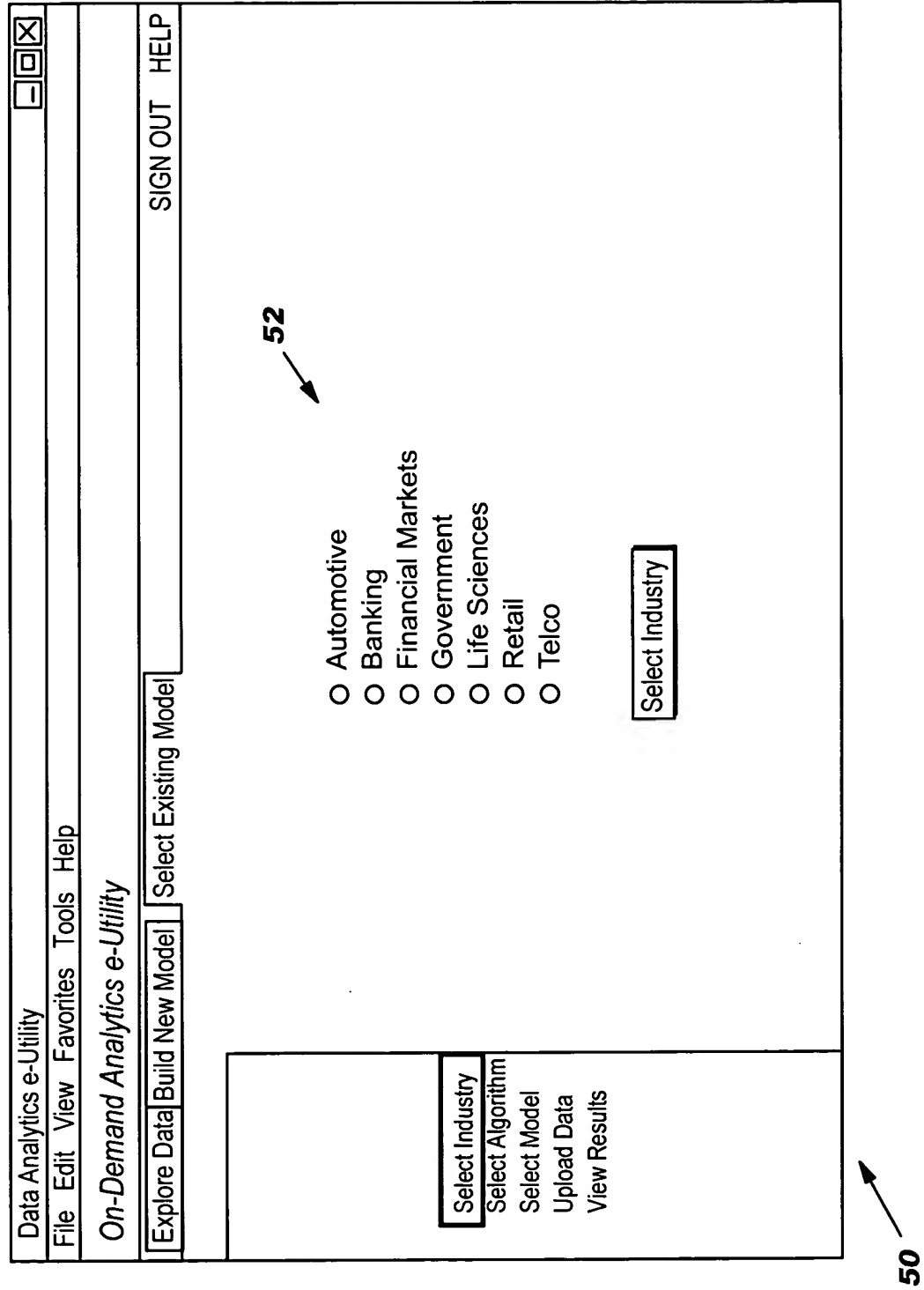USER _26_

10

FIG. 2

Data Analytics e-Utility

File Edit View Favorites Tools Help

On-Demand Analytics e-Utility

SIGN OUT   HELP

Explore Data | Build New Model | Select Existing Model

Select Industry
Select Algorithm
Select Model
Upload Data
View Results

○ Automotive
○ Banking
○ Financial Markets
○ Government
○ Life Sciences
○ Retail
○ Telco

Select Industry

52

50

FIG. 3

Data Analytics e-Utility   □ ▣ ☒

File   Edit   View   Favorites   Tools   Help

On-Demand Analytics e-Utility

                                                  SIGN OUT   HELP

| Explore Data | Build New Model | Select Existing Model |

Select Industry
Select Algorithm
Select Model
Upload Data
View Results

Your Business Problem

The following is a list of business problems which apply to the Retail industry.
If your business objective matches one of these problems, select it and press next.
Otherwise, select "Other" for a more extensive list of algorithms.

○ I would like to determine which sets of products are purchased together by customers.
○ I would like to group together customers with similar buying behavior.
○ I would like to determine if a transaction is valid or a fraud.
○ Other

         56

| Back | | Select Business Problem |

54

FIG. 4

Data Analytics e-Utility

File   Edit   View   Favorites   Tools   Help

On-Demand Analytics e-Utility

SIGN OUT   HELP

| Explore Data | Build New Model | Select Existing Model |

| Basic | Advanced |

| Input data | Input fields | Field parameters | Filters | Settings | Model goal |

Misclassification Cost

Actual	Predicted	Explanation	Cost				
			1	2	3	4	5
Y	N	The actual value of **diseased** is **Y**, but the model predicted a value of **N**	O least acceptable	O	O	O	O most acceptable
N	Y	The actual value of **diseased** is **N**, but the model predicted a value of **Y**	O least acceptable	O	O	O	O most acceptable

Back   Generate Model

Select Industry
Select Algorithm
Upload Data
Set Parameters
View Results

62

60

FIG. 5

ACTUAL	PREDICTED	ERROR	WEIGHT
A	A	NO	
A	B	YES	0.8
A	C	YES	0.7
B	A	YES	0.8
B	B	NO	
B	C	YES	1.0
C	A	YES	0.3
C	B	YES	0.3
C	C	NO	

64

66

FIG. 6

ACTUAL	PREDICTED	ERROR	WEIGHT	RATE	VECTOR
A	A	NO			
A	B	YES	0.8	30	24
A	C	YES	0.7	30	21
B	A	YES	0.8	50	40
B	B	NO			
B	C	YES	1.0	40	40
C	A	YES	0.3	30	9
C	B	YES	0.3	60	18
C	C	NO			

PERFORMANCE VALUE = 152

68 74 70 72